

Fig.12

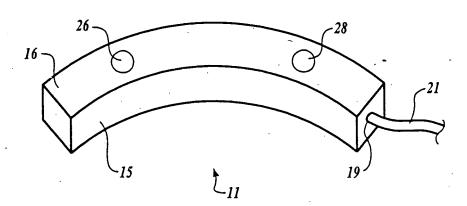
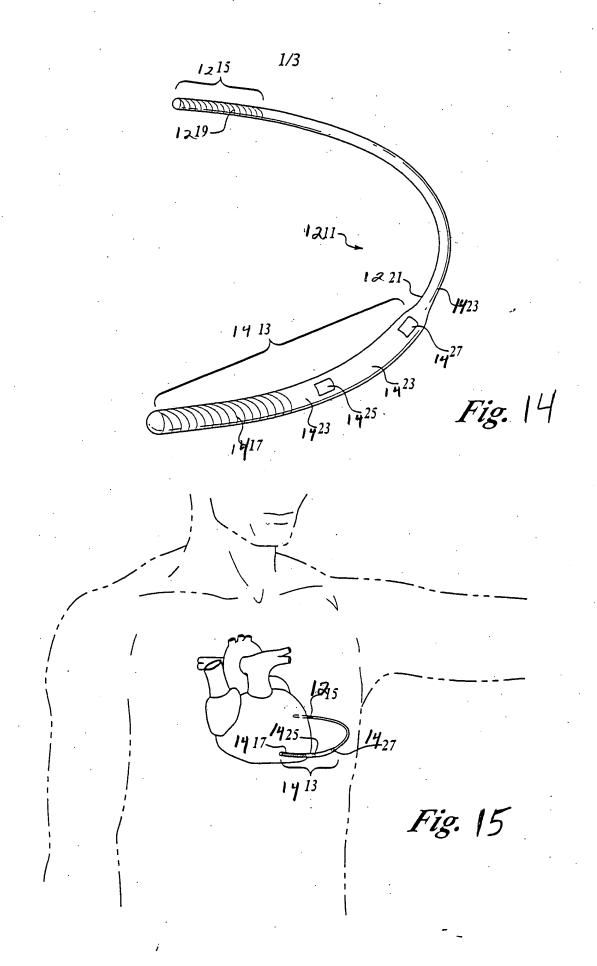
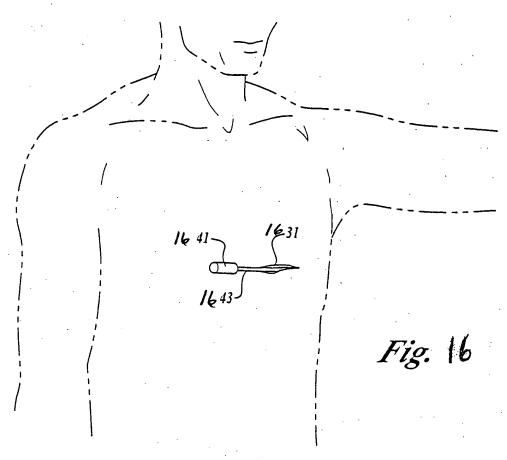
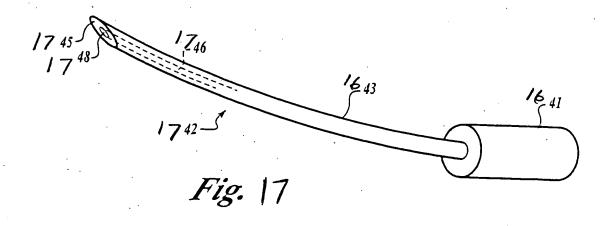


Fig.13







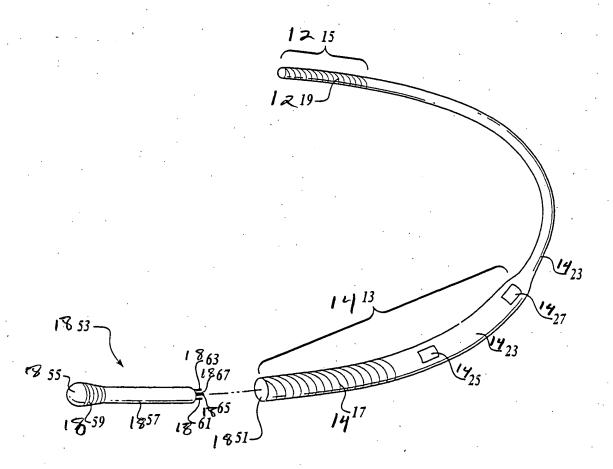


Fig. 18

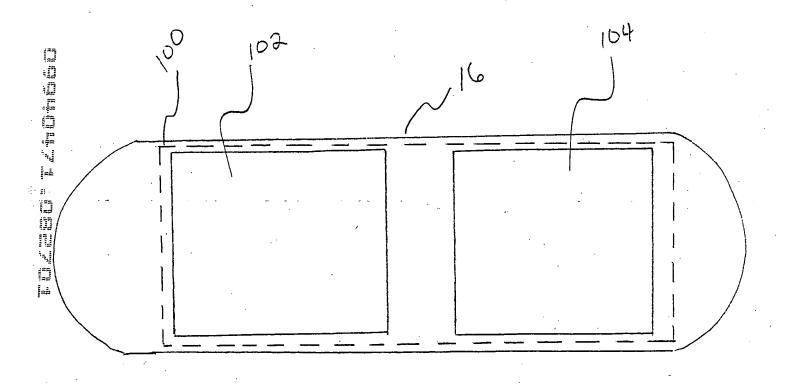


Fig. 19

Capacitors	Effective V	Effective C	Pulse Width	Indiv C	Total Volume
1	350 V	3,380 μF	377 msec	3,380 μF	27.6 cc's
2	700 V	845 µF	94 msec	1,690 μF	27.6 cc's
3	1,050 V	376 μF	42 msec	1,128 μF	27.6 cc's
4	1,400 V	21:1 μF	23 msec	844 μF	27.6 cc's
5	1,750 V	135 μF	15 msec	675 μF	27.6 cc's
6	2,100 V	94 μF	10 msec	564 μF	27.6 cc's

Fig. 20

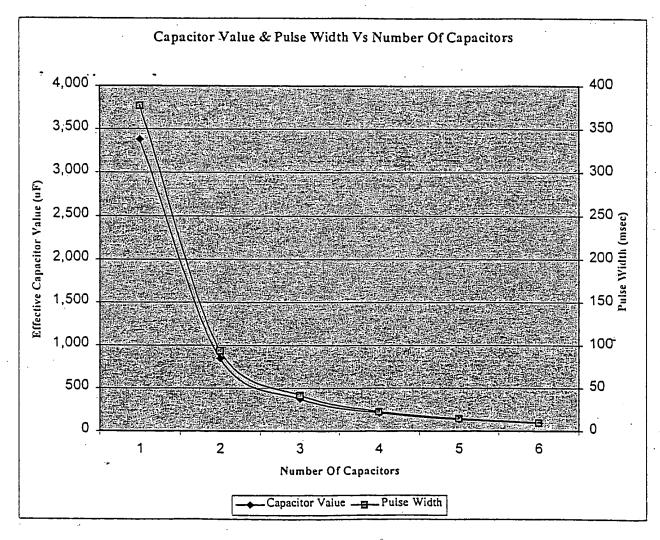


Fig. 21

Charge Times vs. Power Supply Efficiency, Two Batteries

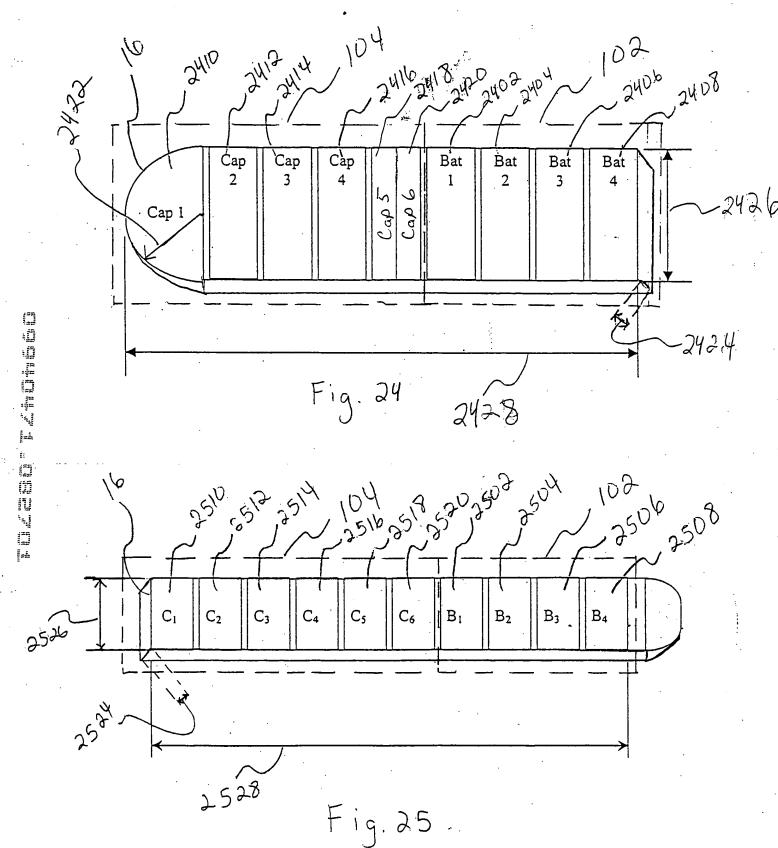
go and go							
Stored Energy	Inverter	Time, BOL	Time, EOL				
	Efficiency						
207 J	65%	25.5 sec	31.8 sec				
207 J	70%	23.6 sec	29.6 sec				
207 J	75%	22.1 sec	27.6 sec				
207 J	80%	20.7 sec	25.8 sec				
207 J	85%	19.5 sec	24.3 sec				
207 J	90%	18.4 sec	23.0 sec				

Fig. 22

Charge Time vs. Number Of Batteries

Energy	Number	Efficiency	Time, BOL	Time, EOL	Number	Time, BOL	Time, EOL
	Batteries				Batteries		
207 J	3	65%	17.0 sec	21.2 sec	4	12.7 sec	1 <i>5</i> .9 sec
207 J	3	70%	15.8 sec	19.7 sec	4	11.8 sec	14.8 sec
207 J	3	75%	14.7 sec	18.4 sec	4	11.0 sec	13.8 sec
207 J	.3	80%	13.8 sec	17.3 sec	4	10.4 sec	12.9 sec
207 J	3	85%	13.0 sec	16.2 sec	4	9.7 sec	12.2 sec
207 J	3	90%	12.3 sec	15.3 sec	4	9.2 sec	11.5 sec

Fig. 23



: E

Device Width's & Length's Vs Thickness

Example	Thickness	Width	Length	Volume
1	0.2 in (0.51 cm)	1.9 in (4.83 cm)	8.0 in (20.32 cm)	- 50 cc's
2	0.3 in (0.76 cm)	1.5 in (3.81 cm)	6.8 in (17.27 cm)	50 cc's
3	0.4 in (1.02 cm)	1.3 in (3.40 cm)	6.0 in (15.24 cm)	50 cc's
4	0.3 in (0.76 cm)	2.0 in (5.08 cm)	4.6 in (11.76 cm)	50 cc's

Fig. 26

## Variations In Capacitors & Batteries At Various Energy Levels

Energy	Energy	Effective	Effec	Pulse	# Of	Invert	WHr	Charge	# Of
Delivered	Stored	Voltage	Cap	Width	Cap's	Eff'y	Per	Time	Batt's
		-	Value	60 Ohm			Charge	BOL	
150 J	207 J	2,100 V	94 μF	10 msec	6	75%	276	11 sec	4
125 J	172 J	1,750 V	112 μF	12 msec	5	75%	229	9 sec	4
100 J	137 J	1,750 V	89 μF	9 msec	5	75%	183	10 sec	3
75 J	103 J	1,400 V	105 μF	9 msec	4	75%	137	11 sec	2
50 J	69 J	1,050 V	125 μF	10 msec	3	75%	92	7 sec	2

Fig. 27